



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY, DOCKET NO.
09/265,669	03/10/99	MARITA	<i>mk</i>

IM52/0817  
MORRISON & FOERSTER  
2000 PENNSYLVANIA AVENUE N.W.  
WASHINGTON DC 20006-1888

SHEEHAN, J.	EXAMINER
-------------	----------

174	PAPER NUMBER
-----	--------------

12  
08/17/01  
DATE MAILED:

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/265,669

Applicant(s)

Makita et al.

Examiner

John P. Sheehan

Art Unit

1742



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on June 6 and 18, 2001
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4, 44, and 45 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 44, and 45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 20) ☐ Other: \_\_\_\_\_

Art Unit: 1742

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Specification*

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1 to 4, 44 and 45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

I. The claims are indefinite in the use of the term, "matched" (claim 1, line 3; claim 3, line 3; claim 45, last line). The meaning of this term in the context of the claims is not clear. For

Art Unit: 1742

example, what does it mean that "the ferromagnetic phase is *matched* with the grain boundary phase" (claim 1, lines 2 and 3, emphasis added by the Examiner)?

II. Claim 2 is indefinite in that what the meaning if of the phrase, "atoms are arrayed *regularly* on both sides of an interface" (claim 2, lines 1 to 3, emphasis added by the Examiner). What are the metes and bounds of the term, "regularly" in this context? What does this term mean in the context of the claims.

III. Claim 3 is indefinite in view of the use of the word "type" (line 2), MPEP 2173.05(b) (under heading, (e) Type).

***Claim Rejections - 35 USC § 102/103***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1742

8. Claims 1 to 4, 44 and 45 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over each of **Ueda et al.** (US Patent No. 5,183,630, hereinafter referred to as Ueda), **Takeshita et al.** (US Patent No. 5,147,447, hereinafter referred to as Takeshita), **Yamamoto et al.'546** (US Patent No. 4,826,546, hereinafter referred to as Yamamoto '546) or **Yamamoto et al. '875** (US Patent No. 4,601,875, hereinafter referred to as Yamamoto '875).

Each of the references teaches specific examples of sintered rare earth containing permanent magnets having compositions which are encompassed by the instant claims. These specific example magnets are made by a process which is the same as applicants' disclosed process, that is, these magnets are made by sintering and cooling at a cooling rate encompassed by applicants' disclosed cooling rate of 10 to 200°C/min. (Ueda, columns 35 and 36, Table 7 Examples 63 to 66 and columns 43 to 46, Table 12, Examples 93 to 96; Takeshita, column 5, lines 50 to 65; column 6, lines 48 to 68; column 7, lines 38 to 55; column 8, line 58 to column 9, line 10; column 9, line 53 to column 10, line 2 and column 11, line 45 to column 12, line 5; Yamamoto '546, column 14, Example 2; and Yamamoto '875, column 13, Example 2 and column 14, Example 5).

The claims and the references differ in that the references do not describe the crystal structure in the same terms as recited in the claims.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositions of the specific examples

Art Unit: 1742

taught by the references are encompassed by the instant claims and are made by the same process as applicants claimed magnets therefore one of ordinary skill in the art would expect that the products taught by the references would be the same as applicant's claimed product.

“Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). ‘When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.’ In re Spada, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977).” see MPEP2112.01.

### ***Response to Arguments***

2. Applicant's arguments filed June 6 and 18, 2001 have been fully considered but they are not persuasive.

Regarding the use of the term “matched”, applicants argue that the Examiner is underestimating the skill of one of ordinary skill in the art and that the specification explains in many places what the inventors defined as “matched” for the purposes of the instant invention. This is not found persuasive. Applicants have not submitted any evidence that establishes that “matched” is a well known term in the art. Further, although the term is used throughout the specification, no where in the specification is the term defined. Applicants point to pages 8 and 9 of the specification (page 9, lines 6 to 8) and state that in this context “matching” means that the

Art Unit: 1742

[ferro]magnetic phase and the grain boundary phase are matched and that since the grain boundary phase is face-centered cubic the [ferro]magnetic is also face-centered cubic. The Examiner is not persuaded. Although the specification at page 9, lines 6 to 8 does disclose that the magnetic phase and the grain boundary phase are matched, the specification does not state in what respect they are matched. For example, are matched in composition, structure, alignment, etc.?

Regarding claim 2 and the use of the term, "regularly" applicants argue that this has meaning to one of skill in the art and that the Examiner has not presented any objective factual reasons why "regularly" in the context of claim 2 is unclear. This is not persuasive. Although stating that this term has meaning to one in the art applicants have not explained to the Examiner what the meaning is of this term. What does it mean that the "atoms are arrayed regularly on both sides of an interface between the ferromagnetic phase and the grain boundary phase" (claim 2, lines 2 to 4)? How does the definition of regular apply to the claim 2? It is not clear to the Examiner what "factual objective reasons" applicants contend are necessary in making this rejection. The meaning of the term is not clear in the context of the claim 2, what more is necessary is not apparent.

Applicants argue "that the Examiner has not provided any reasonable factual basis for his belief that the phrase "crystal type" does not have a meaning that persons skilled in this art would understand in the context of the specification of this application". The Examiner does not agree.

Art Unit: 1742

In making this rejection the Examiner has cited MPEP 2173.05(b) which explains why adding the term "type" to a phrase renders the meaning of the phrase indefinite.

"The addition of the word "type" to an otherwise definite expression (e.g., Friedel-Crafts catalyst) extends the scope of the expression so as to render it indefinite. *Ex parte Copenhaver*, 109 USPQ 118 (Bd. App. 1955). Likewise, the phrase "ZSM-5-type aluminosilicate zeolites" was held to be indefinite because it was unclear what "type" was intended to convey. The interpretation was made more difficult by the fact that the zeolites defined in the dependent claims were not within the genus of the type of zeolites defined in the independent claim. *Ex parte Attig*, 7 USPQ2d 1092 (Bd. Pat. App. & Inter. 1986)."

Applicants also point out that the Examiner has allowed the use of "type" in claims of patents which the Examiner has allowed. This is not persuasive. Each application stands on its own and the prosecution of the cited patents has no bearing on the prosecution of the instant application.

Applicants' argument that none of the reference provides the Examiner with any reasons to believe factually that persons of ordinary skill in the art would have recognized that the magnets disclosed in the references had any grain boundary phases that were free from rare earth elements as claimed in amended claim 1 is not persuasive. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. that the grain boundary phases that are free from rare earth elements) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re*



Art Unit: 1742

*Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Further, as set forth in the statement of the rejection, because the *compositions of the specific examples taught by the references are encompassed* by the instant claims and are made by the *same process* as applicants claimed magnets one of ordinary skill in the art would expect that the products taught by the references would be the same as applicant's claimed product.

“Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. In re Best, 195 USPQ 430, 433 (CCPA 1977). ‘When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.’ In re Spada, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977).” see MPEP2112.01.

#### *Conclusion*

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 1742

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner John P. Sheehan, whose telephone number is (703)-308-3861.

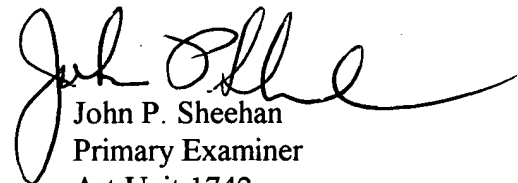
The examiner can normally be reached on Tuesday-Friday from 6:30 A.M.-5:00 P.M.

The fax phone number for this Technology Center is (703)-305-3599.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.

When filing a FAX in Technology Center, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communication with the PTO that are not for entry into the file of the application. This will expedite processing of your papers.

jps  
August 16, 2001

  
John P. Sheehan  
Primary Examiner  
Art Unit 1742